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The effect of chromophores concentration on the nonlinear optical activity of methacrylic copolymers with azochromophores in the side chain

Smirnov M., Mukhtarov A., Ivanova N., Vakhonina T., Semashko V., Balakina M.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. Quadratic nonlinear-optical characteristics of thin films based on methacrylic copolymers with of chromophore-containing monomers incorporated at various concentrations are measured by Second Harmonic Generation technique. Optimal chromophores content is obtained to be about 17 mol%, rather high values of nonlinear-optical coefficient, d33, up to 60 pm/V, are determined.

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